Uncovered Finished Water Reservoir Background

- Interim Enhanced Surface Water Treatment Rule (1998) (IESWTR) requires all new-finished water (fw) reservoirs to be covered; many state and national standards (Ten States) require fw reservoirs to be covered. In the IESWTR preamble, EPA stated it would also collect information on uncovered finished water reservoirs.
- EPA evaluated studies of uncovered finished water storage facilities. LeChevallier et.al. (1997) found fecal coliform, Giardia and *Cryptosporidium* in the outlets of uncovered finished water reservoirs. Other studies (Graczyk et.al. 1996, Geldreich 1990, Fayer and Ungar 1986, Current 1986) found microbial degradation due to small mammals, birds, fish and algal growths.
- The Stage 2 Microbial and Disinfection Byproducts Rule Federal Advisory Committee (FAC) made recommendations in the Stage 2 M-DBP Agreement in Principle (AIP) that all uncovered finished water reservoirs be covered, apply treatment to the reservoir outlet for 3-log *Giardia*, 4- log virus and 2-log *Cryptosporidium* or implement a risk mitigation plan.
- The final Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESTWR), (January 1996) reflected Stage 2 M-DBP AIP recommendations.
- LT2ESWTR requires all uncovered finished water reservoirs to be covered or that the outlet receives treatment (3-log *Giardia*, 4 –log virus and 2-log *Cryptosporidium*). Risk mitigation plan option of the LT2 proposal is not part of the final LT2ESWTR based on public comments that the risk mitigation option is not as protective of public health as covering or treating.
- Systems with uncovered finished water reservoirs must either meet the LT2ESWTR requirements to cover or treat or submit a plan and schedule to cover or treat by April 1, 2009.

